



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TEXAS 75202-2733

February 5, 2014

**MEMORANDUM**

**SUBJECT:** Quarterly cap inspection at the San Jacinto River  
Waste Pits superfund site

**FROM:** Valmichael Leos, Federal On-Scene Coordinator  
Emergency Readiness Team (6SF-PE)

**TO:** File

**I. PURPOSE**

This memorandum is to document the observations of the quarterly cap inspection at the San Jacinto River Waste Pits superfund site (Site) conducted on January 30, 2014. The purpose of the site visit was to inspect the completed removal work which involves a temporary armor cap being used to stabilize the release of dioxin / furan hazardous waste from releasing into the San Jacinto River.

**II. BACKGROUND**

The Site consists of impoundments, approximately 14 acres in size, built in the mid-1960s for the disposal of paper mill wastes and the surrounding areas containing sediments and soils potentially contaminated by the waste materials that had been disposed of in these impoundments. The impoundments are located immediately north of the I-10 bridge and on the western bank of the San Jacinto River in Harris County, Texas. A time-critical removal action was completed in July of 2011 to stabilize the pulp waste material and sediments within the impoundments to prevent the further release of dioxins, furans, and other chemicals into the environment. The removal consisted of placement of an armor rock cap over a geotextile bedding layer and an impermeable geomembrane in some areas.

In accordance with the operations, monitoring, and maintenance (OMM) plan for the Site, the respondents are required to conduct quarterly cap inspections starting January 2012 for the first two years, semi-annually from years three to five, and annually after year five. In addition to the regularly scheduled cap inspections, impromptu inspections may be conducted if a major storm event occurs at or near the site that could adversely affect the protectiveness of the removal action. In addition to the OMM plan, an enhancement work plan dated November 2013 was submitted and approved by EPA that details armor cap improvements with seven distinct areas (see attached Figure 1) improving the slope and material gradation.

The site inspections involve visually inspecting the armor cap for areas of erosion, damage, wear and tear of any exposed geotextile fabric or LLDPE geomembrane liner,

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topographic surveys, manual probing to ensure the cap maintains the prescribed design thickness, and chemical analysis of surrounding pore water. In addition to land and water based inspections of the cap, visual inspections of the site security and perimeter fencing is also conducted. The respondents are required to conduct topographic surveys of the armor cap to ensure a minimum design thickness of the armor cap. If any deficiencies are discovered during the site inspection by either the respondents or the EPA, response procedures for repair have been established in the OMM plan.

### **III. CONCLUSIONS**

On January 30, 2013, EPA OSC Leos conducted a site visit to document observations at the San Jacinto River Waste Pits superfund site. During the site visit it was noted that the Site security fencing visible and intact. Site signage placed along the fencing perimeter was visible and intact.

In addition to inspecting the overall integrity of the armor cap, seven additional areas (see Figure One) were inspected where additional rock was placed and the slopes flattened to provide more stability and strength per the enhancement work plan dated November 2013. The section of the armor cap located above water level was also observed to be intact with no areas of cap erosion evident.

A review of the respondents post TCRA quarterly cap inspection report dated October 2013, which includes a map of topographic surveys completed, have indicated no problematic areas needing cap repair or maintenance. The next quarterly cap inspection is scheduled in May 2014.

Enclosure:- Site Inspection Photos and Figure One

## Site Inspection Photos 9 of 9 & Figure One

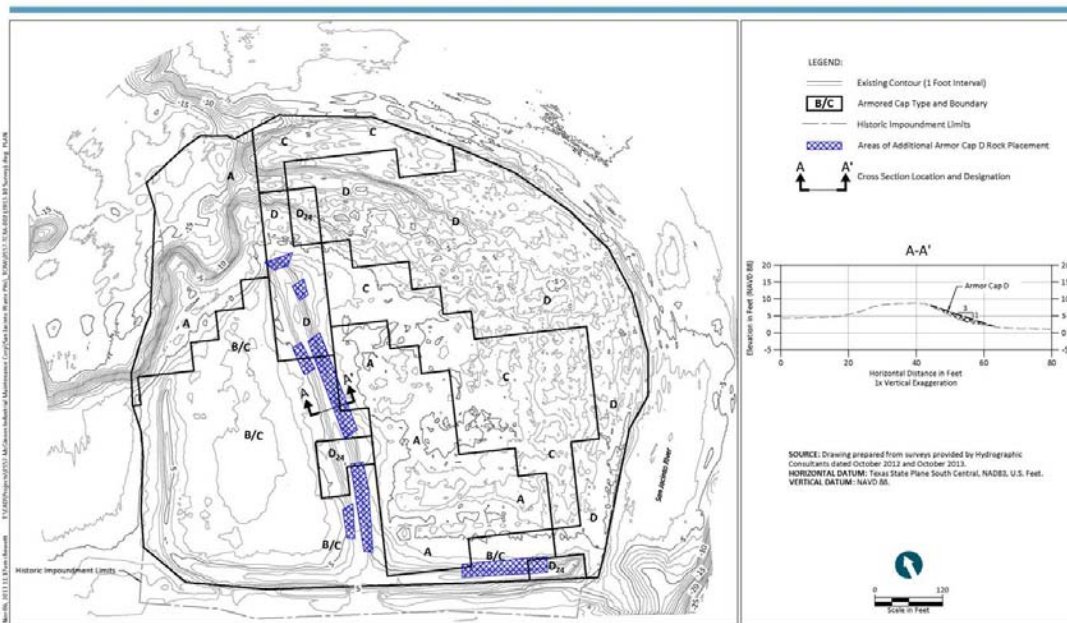


Figure 1  
Armor Cap Repair Plan  
San Jacinto River Waste Pits Superfund Site

Figure 1- Areas to be covered with additional rock and flatten slopes from November 2013 Armor Cap Enhancement plan

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Photo 1- View of Site signage surrounded by vegetative growth South of IH-10 along Eastern bank of San Jacinto River



Photo 2- View of Site perimeter fencing East Gate along IH-10, East of San Jacinto River



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Photo 3- View of Site perimeter fencing Southern Gate, West of San Jacinto River



Photo 4- Picture of Site signage with vegetative growth from street level along fencing South of IH-10 near southern gate

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Photo 5- View of southern berm west of central berm.



Photo 6- View of central berm



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Photo 7- View of southern berm east of central berm.



Photo 8- View of additional rock placed in area along central berm's northern edge

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Photo 9- View of additional rock placed in area along central berm's southern edge